

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/273,468	03/22/99	VOLOKH	V P-68422-US

QM32/0211

EXAMINER

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ART UNIT	PAPER NUMBER
3722	<i>S</i>

DATE MAILED: 02/11/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/273,468	Attendant(s) Volokh
Examiner Henry W. H. Tsai	Group Art Unit 3722

Responsive to communication(s) filed on Mar 22, 1999.

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 1-6 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1-6 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Objections

1. Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Note in claim 4, the limitation of "the second section is concave" is already described in claim 1, lines 3-4.

Specification

2. The disclosure is objected to because of the following informalities:

at page 7, line 15, after "second", --section-- should be inserted; and

at page 8, line 15, after "first", --section-- should be inserted.

Appropriate correction is required.

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Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Note in claim 6, "the milling cutter being any one of the group including an end mills of HSS, Solid Carbide, Cermetsa and Ceramics" should be described in the specification.

5. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 2, "the cutting edge" lacks proper antecedent basis.

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In claim 2, line 1, "the length"; and line 2, "the cutter center" lack proper antecedent basis.

In claim 2, it is not clear what is meant by "the length..., as measured..." since whole claim is not understandable.

In claim 4, as set forth above, the limitation of "the second section is concave" is already described in claim 1, lines 3-4. It is not clear what the further limitation of the claim provides.

In claim 5, it is not clear what is meant by "the meeting point...forming an angle". How can a point form an angle ?

In claim 6, it is not clear what is meant by "a group including an end mill". Note a group should include more than one member.

In claim 6, line 2, it is not clear what is meant by "Cermetsa" since it was not defined.

Applicant is required to review the claims and correct all language which does not comply with 35 U.S.C. § 112, second paragraph.

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Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-6, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by the French Patent No. 1.190.274 (BR'274).

BR'274 discloses the claimed invention, as shown in Fig. 4, comprising: each tooth having a tooth face comprising at least two sections, a first section nearest the cutting edge (F) having a convex form, and a second section in a concave form (bear the center G).

BR'274 also discloses a concave chip-breaking section (N, or P in Fig. 4) between the first section and the second section having the first section and the concave section forming an angle.

Note inherently, BR'274'a device is any one of the group including end mills of HSS, Solid Carbide, Cermet and Ceramics.

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Prior Art References

8. The prior art references listed in the attached PTO-892, but not used in a rejection of the claims, are cited for their device structure.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Tsai whose telephone number is (703) 308-7600. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, A. L. Pitts can be reached on (703) 308-2159. The fax number for TC 3700 is (703) 305-3579. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 3700 receptionist whose telephone number is (703) 308-1148.

10. In order to reduce pendency and avoid potential delays, Group 3700 is encouraging FAXing of responses to Office actions directly into the Group at (703)305-3579. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize

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charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 3700 will be promptly forward to the examiner.



Henry W. H. Tsai

Patent Examiner
Art Unit 3722
February 9, 2000